The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

1. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:21 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:21, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated or unformylated.

2. (Previously presented) The peptide consisting of SEQ ID NO:1 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:1 according to claim 1, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated or unformylated.

3. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:16 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:16, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated.

4. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:21 or SEQ ID NO:22 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:21 or SEQ ID NO:22, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated.

5. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:21 or SEQ ID NO:22 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:21 or SEQ ID NO:22, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction

activity, and a methionine residue at the N-terminus, if any, is formylated and an isoleucine residue at the C-terminus, if any, is modified.

6. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:17 or SEQ ID NO:23 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:17 or SEQ ID NO:23, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated or unformylated.

7. (Previously presented) The peptide consisting of the amino acid sequence of SEQ ID NO:17 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:17 according to claim 6, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated or unformylated.

8. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19 or SEQ ID NO:20 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19 or SEQ ID NO:20, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated.

9. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:23 or SEQ ID NO:24 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:23 or SEQ ID NO:24, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Previously presented) An isolated antibody against a peptide consisting of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:21, its amide or ester, or salts thereof, wherein a methionine residue at the N terminus of the peptide is formylated or unformylated.

16. (Previously presented) An isolated antibody against a peptide consisting of the amino acid sequence of SEQ ID NO:17 or SEQ ID NO:23, its amide or ester, or salts thereof, wherein a methionine residue at the N terminus of the peptide is formylated or unformylated.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Previously presented) A method for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 1, its amide or ester, or salts thereof, which comprises;

(A)

(a) contacting (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, with (2) (i) the peptide according to claim 1, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a

binding property between the receptor protein or a salt thereof, and the peptide according to claim 1, its amide or ester, or salts thereof,

and

(b) measuring a binding level of 2(i) said peptide, its amide or ester, or salts thereof, to (1) said receptor protein;

(B)

(a) contacting (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity and a test compound, with 2(i) the peptide according to claim 1, its amide or ester or salts thereof, or (ii) the compound or a salt thereof, that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 1, its amide or ester, or salts thereof, to (1) said receptor protein; and

(C) comparing the binding level of step (A) with the binding level of step (B).

25. (Previously presented) A method for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 6, its amide or ester, or salts thereof, which comprises;

(A)

(a) contacting (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, with (2) (i) the peptide according to claim 6, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 6, its amide or ester, or salts thereof,

and

(b) measuring a binding level of (2)(i) said peptide, its amide or ester, or salts thereof, to (1) said receptor protein;

(B)

(a) contacting (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity and a test compound, with (2)(i) the peptide according to claim 6, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof, that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 6, its amide or ester, or salts thereof,

and

(b) measuring a binding level of (2) (i) said peptide, its amide or ester, or salts thereof, to (1) said protein receptor; and

(C) comparing the binding level of step (A) with the binding level of step (B).

26. (Previously presented) The screening method according to any one of claims 24, 25, 70, 71 and 72, wherein the G protein-coupled receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, is a G protein-coupled receptor protein consisting of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

27. (Previously presented) A kit for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 1, its amide or ester, or salts thereof, which comprises;

(A) (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, or (2) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homolog to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, and

(B)(1) (i) the peptide according to claim 1, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 1, its amide or ester, or salts thereof or (2) (i) a labeled peptide according to claim 1, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and a labeled peptide according to claim 1, its amide, or ester, or salts thereof.

28. (Previously presented) A kit for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 6, its amide or ester, or salts thereof, which comprises;

(A) (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, or (2) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, and

(B)(1) (i) the peptide according to claim 6, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 6, its amide or ester, or salts thereof, or (2) (i) a labeled peptide according to claim 6, its amide or ester or salts thereof, or (ii) the compound or salt thereof that alters a binding property between the receptor protein or a salt thereof, and a labeled peptide according to claim 6, its amide or ester, or salts thereof.

29-57. (Canceled)

58. (Canceled)

59. (Canceled)

60. (Previously presented) A method for inhibiting a cell stimulation, or a method for preventing/treating infectious disease, which comprises administrating to a mammal an effective dose of an antibody selected from the group consisting of: (i) the antibody according to claim 15, (ii) the antibody according to claim 16, and (iii) the antibody according to claim 66.

61. (Canceled)

62. (Previously presented) A peptide consisting of the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated or unformylated.

63. (Previously presented) The peptide consisting of the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22 according to claim 62, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated.

64. (Previously presented) The peptide consisting of the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22 according to claim 62, its amide or ester, or salts thereof, wherein the peptide has a ligand activity or a signal transduction activity, and a methionine residue at the N-terminus, if any, is formylated and an isoleucine residue at the C-terminus, if any, is modified.

65 (Canceled)

66. (Previously presented) An isolated antibody against a peptide consisting of the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:22, its amide or ester, or salts thereof, wherein a methionine residue at the N-terminus of the peptide is formylated.

67. (Canceled)

68. (Canceled)

69. (Previously presented) A method for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G-protein-coupled receptor protein or salts thereof, and the peptide according to claim 62, its amide or ester, or salts thereof, which comprises:

(A)

(a) contacting (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, with (2) (i) the peptide according to claim 62, its amide or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 62, its amide or ester, or salts thereof,

and

(b) measuring a binding level of (2) (i) said peptide, its amide or ester, or salts thereof, to (1) said receptor protein;

(B)

(a) contacting (1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity and a test compound with (2) (i) the peptide according to claim 62, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 62, its amide or ester, or salts thereof,

and

(b) measuring a binding level of (2) (i) said peptide, its amide or ester, or salts thereof, to (1) said receptor protein; and

(C) comparing the binding level of step (A) with the binding level of step (B).

70. (Previously presented) A method for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 62, its amide or ester, or salts thereof, which comprises:

(A)

(a) contacting (1) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or its salts thereof wherein the peptide has a ligand activity or a signal transduction activity, with (2)(i) the peptide according to claim 62, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 62, its amide or ester, or salts thereof,

and

(b) measuring a cell stimulating activity;

(B)

(a) contacting (1) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least a 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity and a test compound with (2)(i) the peptide according to claim 62, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 62, its amide or ester, or salts thereof,

and

(b) measuring a cell stimulating activity; and

(C) comparing the cell stimulating activity of step (A) with the cell stimulating activity of step (B).

71. (Previously presented) A method for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 1, its amide or ester, or salts thereof, which comprises:

(A)

(a) contacting (1) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or its salts thereof wherein the peptide has a ligand activity or a signal transduction activity, with (2)(i) the peptide according to claim 1, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt

thereof, and the peptide according to claim 1, its amide or ester, or salts thereof,

and

(b) measuring a cell stimulating activity;

(B)

(a) contacting (1) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least a 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity and a test compound with (2)(i) the peptide according to claim 1, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 1, its amide or ester, or salts thereof,

and

(b) measuring a cell stimulating activity; and

(C) comparing the cell stimulating activity of step (A) with the cell stimulating activity of step (B).

72. (Previously presented) A method for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 6, its amide or ester, or salts thereof, which comprises:

(A)

(a) contacting (1) a cell producing the receptor protein comprising the amino acid of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity, with (2) (i) the peptide according to claim 6, its amide or

ester, or salts thereof, or (ii) the compound or salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 6, its amide or ester, or salts thereof,

and

(b) measuring a cell stimulating activity;

(B)

(a) contacting (1) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity and a test compound, with (2) (i) the peptide according to claim 6, its amide or ester, or salts thereof, or (ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 6, its amide or ester, or salts thereof,

and

(b) measuring a cell stimulating activity; and

(C) comparing the cell stimulating activity of step (A) with the cell stimulating activity of step (B).

73. (Previously presented) A kit for screening a compound or a salt thereof that alters a binding property or a signal transduction between a G protein-coupled receptor protein or salts thereof, and the peptide according to claim 62, its amide or ester, or salts thereof, which comprises:

(A)

(1) the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts

thereof wherein the peptide has a ligand activity or a signal transduction activity,

or

(2) a cell producing the receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence having at least 90% homology to the amino acid sequence of SEQ ID NO:2, a partial peptide of the receptor protein or salts thereof wherein the peptide has a ligand activity or a signal transduction activity;

(B)

(1)

(i) the peptide according to claim 62, its amide or ester, or salts thereof,

or

(ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and the peptide according to claim 62, its amide or ester, or salts thereof,

or

(2)

(i) a labeled peptide according to claim 62, its amide or ester, or salts thereof,

or

(ii) the compound or a salt thereof that alters a binding property between the receptor protein or a salt thereof, and a labeled peptide according to claim 62, its amide or ester, or salts thereof.